

DESCRIPTION

Prop builders and effects engineers have long known the versatility of the hobby servo but have sometimes been plagued by servo power requirements. The EFX-TEK Servo Power Board solves the power problem when using the Prop-1, Prop-2, and Prop-SX (and similar) controllers – simply plug it in, provide a high-current power source for the servos and enjoy worry-free operation.

PRODUCT APPLICATIONS

- Props and holiday displays
- Special FX

FEATURES & BENEFITS

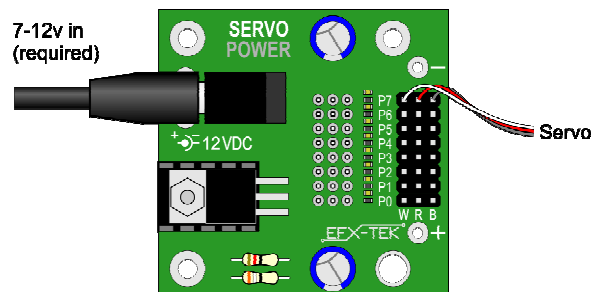
- Provides regulated, high-current power for up to eight servo channels
 - output current up to 3A at 5vdc
 - voltage output can be customized (*requires component changes*)
- Filter on each channel protects controller from noisy servo circuitry
- 2.1mm center-positive power input; 7 to 12vdc
 - optional solder pads for power input/output for OEM applications
- Compact size: 2" x 2" (50.8mm x 50.8mm)

Mounting the Servo Power Board

Mount the SPB by mating the 3x8 female socket with the 3x8 TTL header on the Prop-1, Prop-2, or Prop-SX. Secure the SPB to the controller using a stand-off and screws (provided).

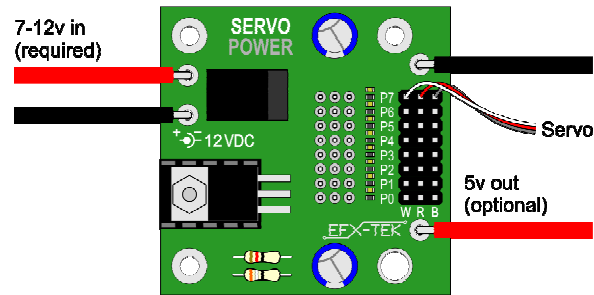
Power Input: Option 1

Connect a 7- to 12-volt (recommended) power supply to the SPB power input connector. The power connector is a 2.1mm, center-positive barrel type. Regulated 5v is available from the power pads adjacent to the servo output header (use of these pads is optional).



Power Input: Option 2

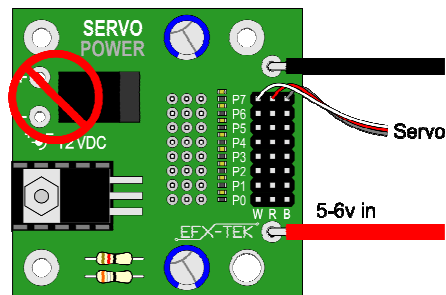
Connect a 7- to 12-volt power supply to the power input [solder] pads as shown below.



CAUTION: Use caution when soldering directly to the SPB; improper technique could damage the board and void the warranty. If in doubt, consult a qualified electronics technician for assistance.

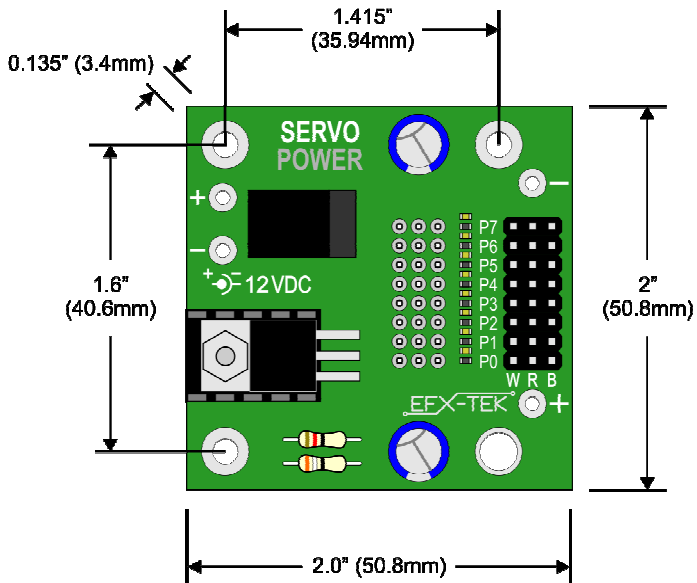
Power Input: Option 3

Connect a well-regulated 5- to 6-volt power supply to the power output pads as shown below.



WARNING: Do not use the power input connector or input pads when providing regulated power as shown in Option #3.

MECHANICAL SPECIFICATIONS



ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Specification			Unit
		Min.	Typical	Max.	
Supply Voltage	V_{IN}	7		12	VDC
Servo Supply Voltage	V_{SERVO}	4.75	5	5.25	VDC
Servo Supply Current	I_{SERVO}			3.0	A
Operating Temperature	T_{OP}	-40	25	85	C

Specifications subject to change without notice.

Accessories

750-00007 12 VDC, 1 Amp power supply

Additional Applications

For additional ideas and application notes for the Servo Power Board be sure to visit us on the Internet at the following links:

www.efx-tek.com
forums.efx-tek.com

Errata